Synopsis with Revised Title

INDIA'S EXTERNAL DEBT: AN ANALYSIS OF GROWTH, CAUSES, MANAGEMENT AND IMPACT

SYNOPSIS

SUBMITTED FOR THE REGISTRATION FOR

THE DEGREE OF DOCTOR OF PHILOSOPHY

IN COMMERCE

UNDER THE SUPERVISION OF
DR. SWAMI PRASAD SAXENA
ASSOCIATE PROFESSOR

SUBMITTED BY
ISHAN SHANKER
ENROLMENT NO.: 100310

DEPARTMENT OF APPLIED BUSINESS ECONOMICS
FACULTY OF COMMERCE
DAYALBAGH EDUCATIONAL INSTITUTE (DEEMED UNIVERSITY)
DAYALBAGH, AGRA 282 110

INDIA'S EXTERNAL DEBT: AN ANALYSIS OF GROWTH, CAUSES, MANAGEMENT AND IMPACT

INTRODUCTION

In present epoch of globalization, the world economies are inter-connected and inter-reliant. Accordingly, the wellbeing of these inter-linked economies is important not only for themselves, but for sake of growth momentum of whole world economy.[1] The global growth and welfare requires overall economic development or the development of all the economies around the world. Economic development is a process where an economy's real national income increases over a long period of time. Further, the process of economic development requires interaction among various factors of production, e.g. natural resources, trained labour force, and capital. Capital formation or mobilization of financial resources is the crux of the whole problem of economic development.

For developing/ emerging economies, there are various alternative means of finance such as savings, surplus from public undertakings, taxation, deficit financing, and the internal and external borrowings. However, the economic development of a country may be financed either by domestic savings or by allowing and encouraging foreign investment. When there is a gap between domestic savings and investments, and foreign direct investment inflows are not significant, a country may resort to borrowing from internal or external sources. Borrowing from internal sources is referred to as internal debt whereas borrowing from external sources is called external debt.

The neoclassical growth theorists consider capital accumulation (accumulation of savings) as an essential ingredient of economic growth. According to them, rate of interest is the key to savings as also to investment. Other factors promoting output-expansion as described by neoclassical economists are population, technology, and international trade.[2] Some economists consider borrowings appropriate to finance government expenditure which results in creation of productive capital assets. They believe that foreign debt kills two birds with one stack by helping to bridge the saving gap and foreign exchange.[3]

External debt as a tool to promote economic growth had been one of the prominent topics of debate among economists. Neoclassical economists argue that external debt is one of the important sources of capital for a country; accordingly it has positive impact on investment and the economic growth. Some economists contradict this view; they consider external debt as one of the factors hampering economic growth. In support of their view they describe the problems associated with external debt, e.g. problem of debt accumulation,

---

1 Thirlwall AP (2006), "Growth and Development with Special Reference to Developing Economies", 8th Edition, Palgrave Mc Milan, pp-456

2 Agarwal AN and Kundan Lal (1994), "Economics of Development and Planning", 2nd edition, Vikas Publications, pp-14.1.

3 Jain Gopal Lal (1999), "Economic Growth and Development in India and other Developing Countries", Mangal Deep Publication, pp-10-11

debt sustainability, inability of a country to meet debt obligations, inability of a country to raise foreign loans in its own currency etc.

Eichengreen, Hausmann, Panizza and Rigobon were of the view that accumulation of external debt particularly in developing countries like India may lead to problem of original sin. Original Sin (OSIN) refers to the inability of developing countries in raising foreign loans in their own currencies, which in turn results into excessive foreign borrowings, and increases vulnerability during the phases of crises. When country's external debt is denominated in foreign currency, the real exchange rate depreciates, the purchasing power of domestic output reduces over foreign claims, and it makes more difficult for a country to service its debt. Knowing that shocks affecting the real exchange rate can disrupt country's ability to service its debt, foreign lenders may be less willing to lend.

If a country is unable to borrow in its own currency, mismatches, debt intolerance (mismanagement of debt), capital flight etc may ascend. The main determinants of this problem (original sin) are level of development, monetary credibility, fiscal solvency, credit market imperfections, poor contract enforcement, exchange rate regime, political economy arguments, and some other international causes.[4]The inability of developing countries to borrow abroad exists due to weak macroeconomic environment that normally persists in developing countries. The main indicators for measuring problem of original sin are OSIN1 and OSIN3. These indicators basically measure the dominance of foreign issuer in the international market in a given currency.

A contrary view is that the inability of emerging markets to borrow abroad in their own currencies is simply a corollary of other distortions to their economies that remove the incentive for lending and borrowing. It is commonly understood that weak policies and institutions in emerging markets depress the marginal productivity of capital. In this situation capital transfer neither enhances welfare of these countries, nor that of the world as a whole. Another possible reason of reluctance of foreign lenders to lend particularly to developing countries in its own currency is that the authorities of these countries are prone to manipulate value of their currency with a view to reduce the real value of their debt. Institutional and policy reforms giving investors' confidence that the value of the currency will be maintained may thus be necessary for a country to be able to borrow abroad in its own currency.[5]

Economic theory suggests that reasonable levels of borrowing by a developing country are likely to enhance its economic growth. Countries at early stages of development have small stocks of capital and are likely to have investment opportunities with rates of return higher than those in advanced economies. As long as they use the borrowed funds for productive investment, they do not suffer from macroeconomic instability. Reasonable levels of external debt taken for productive investment enhance economic growth, but beyond

---

[4] Ricardo Hausmann, and Ugo Panizza (2003), "The Mystery of Original Sin", Kennedy School of Government, Harvard University, and Research Department Inter-American Development Bank, pp-1-5

[5] Eichengreen Barry, Ricardo Hausmann, Ugo Panizza (2003), "Currency Mismatches, Debt Intolerance and Original Sin", NBER working paper/ w10036, PP 3-5.

certain levels additional indebtedness reduces growth. Hence, country borrowing from abroad must keep in mind debt management aspects as major policy concern. Inappropriate and excessive foreign borrowing generates debt service obligations which may constraint future policy along with growth.

Debt problem for governments arises when their debt-servicing capacity does not keep pace with growth of debt. This is the situation when a country's external debt exceeds sustainable levels. If debt will be larger than the country's repayment ability, expected debt-service costs will discourage further domestic and foreign investment, and thus it will harm growth.[6] All this is concerned with the determination of the feasibility/ sustainability position of external debt. Sustainable debt is that level of debt which allows a debtor country to meet its current and future debt service obligations in full, without debt relief, accumulation of arrears, and rescheduling.[7]The Report of World Bank and International Monetary Fund (IMF)on External debt Sustainability (2001) also stated that a country can be said to achieve external debt sustainability if it can meet its current and future external debt service obligations in full, without recourse to debt rescheduling or the accumulation of arrears and without compromising growth. To this end the report prescribed that it can be attained "by bringing the net present value (NPV) of external public debt down to about 150 percent of a country's exports or 250 percent of a country's revenues".[8]

THE GENESES OF INDIA'S EXTERNAL DEBT

One of the main concerns in economic policy is to improve the living standards of the population, which can be achieved through promotion of investment and the faster economic growth. To promote investment a country must have enough resources; otherwise, it will have to borrow from other countries. This is indeed one of the constraints faced by most developing countries. They do not have enough resources; therefore, they have to incur external debt as a channel to spur economic growth.

Further, when a country runs a current account deficit on its balance of payments, then to finance the deficit, it may borrow from external sources apart from encouraging foreign investments. It is normal for developing countries to run current account deficit which leads to external borrowings. India has been borrowing both from internal and external sources since Independence to finance its investment programme.

Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of principal and/ or interest by the debtor at some point(s) in the future and that are owed to non -residents by residents of an economy.[9] In other words, external debt means debt owed by a country to foreign

---

6 Catherine Pattillo, Poirson and Luca Ricci (2002), "External Debt and Growth", Finance and Development: A Quarterly Magazine from IMF, June 2002, Volume 39, No. 2, PP-8

7 Muwanga ESK Zake and Stephen N (1996), "The HIPC Debt Relief Initiative: Uganda's Experience", UNCTAD Discussion Paper No. 2001/ 94, pp-67-78.

8 Report of World Bank and IMF (2001), "The Challenge of Maintaining Long Term External Debt Sustainability", Volume 1, pp-6

9 IMF (2003), "External Debt Statistics: Guide for Compilers and Users", pp. I-XVI & 1-3.

governments or foreign nationals or international institutions. The economic rationale for debt creation is that borrowers can earn a higher economic return than the cost of invested funds and that these economic returns can then be translated into financial returns. There is still an on-going debate on the determinants of the demand for overseas borrowing by developing countries. The determinants of external indebtness of a country can broadly be classified into four categories; viz., poverty driven indebtedness (the savings gap), the foreign exchange gap, the return argument, and the contribution of external factors.[10]

The reasons of India's external indebtness are structural in nature. These include debt-financed development strategy of Indian Planners, and preference of debt financing over foreign direct investment. External debt accumulation in Indian is largely associated with chronic current account deficits (CAD). The other components include repayment, negative balance of direct and portfolio capital inflow, and the reserve accumulation. The sources of external debt in India are grouped under various categories; these include Multilateral and Bilateral Debt, Loan from IMF, Export Credit, Commercial Borrowing, Non-Resident Deposits, Rupee Debt, and Short Term Debt. The external debt in India also includes money owed to private commercial banks, other governments, or international financial institutions such as IMF and World Bank.

Indian economy during the period 1972-89, was exposed to various kinds of internal and external shocks causing upsurge of external debt. During the time frame of 1974-79, 1980-89, 1985-89, first two periods coincide with two post-oil shock periods and two economic regimes, namely import substitution regime and a more liberalized economic regime. However, the oil prices increase of late 1973 and 1974 dealt a severe blow to the Indian economy in contrast to all expectations. During the period of 1980-85 the oil price increase of late seventies came at a time when India began to move from inward-oriented economic regime (based on import substitution) to a more outward-oriented (liberalized) economic regime. In 1985, the seventh five year plan (1985-1990) promoted relaxation of market regulations with heavy external borrowings to increase exports. Though, the thrust increased the growth rate (riding on costly imports supported by foreign borrowings which the industries would not able to service), it also led to a substantial increase in foreign indebtness that played major role in BoP crises of 1991.[11] The crises were immediate by first gulf war (1991) which had two-prolonged negative impact on India's foreign exchange reserves. First, the war led the oil crises to go upward forcing India to use its forex in comparatively shorter period, and second, the private remittances from Indians working in a gulf region fell down fast (due to emergency evacuation). The BOP Crises also reflected problem of rising foreign debt, a fiscal deficit over 8 percent of GDP and hyper-inflation over 13 percent.[12]

---

[10] Menbere Workie Tiruneh (2004), "An Empirical Investigation into the Determinants of External Indebtedness" Prague economic papers, pp-261.

[11] Barkley J Rosser Jr. and Marina Rosser (2005), "Comparative Economics in a Transforming World Economy", Prentice Hall of India, New Delhi, 2nd Ed., pp-469

[12] Joshi Vijay and IMD Little (1996), "India's Economic Reforms 1991-2001", Oxford Clarendon Press, pp-17

The problem of balance of payment crisis initiated in 1985 in India became severe by the end of 1990. Although there was satisfactory growth in exports, but was overshadowed by growth in imports. The problem was aggravated due to stagnant flows in invisibles such as tourism and private transfers and mounting debt service burden. The current account deficits which were sustained mainly by borrowing from commercial sources and NRI deposits with short maturities and variable interest rates resulted in a ballooning of repayment burden towards 1990. The size of external debt reached US$ 83 billion by March 1991, out of which 45 percent was contracted from private creditors at variable interest rates. In nutshell, by the end of 1990 government was close to default, the RBI refused new credit, and the foreign exchange reserves reduced to such point that India could barely finance three weeks' imports. Accordingly, India had to airlift its gold reserves to pledge with International Monetary Fund (IMF) for external debt.

To overcome all this fiscal and balance of payment (BoP) crisis the Govt. of India on 23rd July 1991 launched process of economic reforms, where the Extended Fund Facility (EFF) of International Monetary Fund (IMF) was provided to mitigate the crises given. But such support put some obligatory conditionalties which led to emergence of so called LPG or Rao-Manmohan Model, and raised the elevation of external debt in India. The external debt stock of India in 1991 was US$ 75,857 million which reached to US$ 3, 34,331 billion in 2011 indicating a drastic increase in external debt in post liberalization era.[13] The external debt stock of India at end-December 2012 stood at US$ 376.3 billion, recording an increase of US$ 30.8 billion (8.9 per cent) over the level of US$ 345.5 billion at end-March 2012. In rupee terms, it increased from Rs. 17, 65,978 crore at end-March 2012 to Rs. 20, 60,904 crore at end-December 2012, reflecting an increase of 16.7 per cent.[14]

REVIEW OF LITERATURE

Though, sufficient literature is available on causes, effects, and management of external debt, most of them are confined to individual and/ or developed economies. A very few researchers have attempted to describe the issue in reference to developing and emerging market economies. Among these, most of the researchers have same fundamental arguments; they deviate with respect to the choice of covariates that determine the demand for external loans and their methodological approaches. Following section presents a brief review of prominent studies carried out by researchers in India and abroad.

Eaton and Gersowitz (1981)[15] were among the first to look at this issue. The theoretical model and its corresponding empirical counterpart developed by authors in their paper are based on three foundations, e.g., the amount of a country's debt is determined by its willingness to borrow and a credit ceiling; a rise in income variability (measured by the standard deviation of exports) boosts the demand for borrowing; and while a rise in the

[13] Ministry of Finance (2011), "Report on External Debt Status", Govt. of India, p-4

[14] Ministry of Finance (2012), "Report on External Debt Status", Govt. of India, p-1

[15] Eaton J and M Gersowitz (1981), "Debt with Potential Repudiation: Theoretical and Empirical Analysis", Review of Economic Studies, 48 (2), pp - 301.

growth rate of GDP leads to higher demand for borrowing, it decreases or increases the credit ceiling depending of the degree of risk aversion.

Eichengreen and Portes (1986)[16] using both annual cross-sectional and panel data forperiod 1930-38 of 16 to 23 countries indicated that while export instability and degree of openness are positively correlated with government external debt, they are not statistically significant. The only explanatory variable that was always significantly different from zero is the log of GDP per capita (LGDP). Shifting their approach to panel data, they indicated that all the variables except export variability turned out to be statistically significant. In a different approach, Hajivassiliou (1987)[17] using data for 79 developing countries for a period 1970-82, and considering the demand for and the supply of loans separately, found that the demand for borrowing is positively determined by total debt service to export ratio, growth of GDP per capita, import to GDP ratio, interest and principal to export ratios and negatively by real GDP per capita.

Menbere (2004)[18] in his study using panel data approach separately for 21 Highly Indebted Poor Countries (HIPCs) and Least Developed Countries (LDCs) found that poverty (the savings gap), income instability, and external factors such as debt service payments and capital flight were main causes of overseas borrowing by developing countries during 1980s and 1990s. Thus, various researchers have contrasted what evokes a country to take option for external debt.

In recent years some researchers have been working on the balance sheet approach which emphasis on the disturbances on assets, liabilities and net worth of the federal government. These researchers highlighted the determinants of CAD (current account deficit), and the problems associated with external debt, namely, currency mismatches, debt intolerance, and original sin. The external debt in foreign currency results into excessive foreign borrowings, debt service problems, and increased vulnerability during crises. Further, when country's external debt is denominated in foreign currency, the real exchange rate depreciates, the purchasing power of domestic output reduces over foreign claims, and it makes more difficult for a country to service its debt.

Ricardo and Panizza (2002)[19] tested the concept of original sin in a sample of 22 developing and developed countries for a period 1993-2001 and bond issues of international financial institutions by using correlation and reverse causality. Eichengreen et al. (2003)[20] in contrast

---

[16] Eichengreen B Joseph and Rene Portes (1986), "Debt and Default in the 1930s: Causes and Consequences", European Economic Review, 30 (3), pp - 599-640.

[17] Hajivassiliou VA (1987), "The External Debt Repayments Problem of LDC's: An Econometric Model Based on Panel Data", Journal of Econometrics, Number 36 (1-2), pp - 205-230

[18] Menbere Workie Tiruneh (2004), "An Empirical Investigation into the Determinants of External Indebtedness" Prague economic papers, pp-261

[19] Ricardo Hausmann, and Ugo Panizza (2003), "The Mystery of Original Sin", Kennedy School of Government, Harvard University, and Research Department Inter-American Development Bank, pp-1

[20] Eichengreen Barry, Ricardo Hausmann, Ugo Panizza (2003), "Currency Mismatches, Debt Intolerance and Original Sin", NBER working paper/ w10036, PP 3-5.

also tested three issues namely, debt intolerance, currency mismatches and original sin by using OLS on various macroeconomic indicators taking a sample of selected advanced and developing economies for a period 1993-2001. They found that these terms are analytically distinct to each other.

The creation of debt is a natural consequence of economic activity; however external debt management and sustainability is an important issue. A number of empirical studies conducted in the past shed some light on external debt sustainability. Cuddington (1996)[21]made an attempt to assess fiscal deficit sustainability in US and other industrial countries. Applying both the Accounting approach and the Present Value Constraint (PVC) approach he concluded that the situation of fiscal deficit in selected countries is under control. Daud (2009)[22] in his thesis analyzed the sustainability of current account and fiscal position of high, middle, low income countries using unit root test. The results of the study revealed that only high income countries are in sustainable current account position and the remaining countries have unsustainable position of current account.

External debt allows a country to invest and consume beyond the limits of current domestic production and in effect, finance capital formation not only by mobilizing domestic savings but also by tapping savings from capital surplus countries. There are different views regarding the expected relationship between external debt and economic growth. Catherine et al. (2002)[23]in their study analyzed the non-linear impact of external debt on economic growth taking large set of data for a period 1969-98 covering 93 developing countries. By applying econometric methodologies (GMM), regression specifications, and different debt indicators they observed marginal negative impact of debt on economic growth for about half of the values. These values indicated that high debt appears to reduce growth mainly by lowering the efficiency of investment rather than its volume.

Kalonji et al. (2003)[24]in an attempt to explore the relationship between external debt and poverty also used General Method of Moments (GMM) on 67 low income countries during period 1985-1999. He found that external indebtness indicators have a limited but important impact on economy. Arnone (2005)[25]in his paper alsofound that large debt stocks lead to capital flight, high tax rates and continuous over-borrowing with a negative effect on growth. Imed and Sami (2005)[26] investigated the non-linear effect of external debt on

---

[21] Cuddington John T (1996), "Analyzing the Sustainability of Fiscal Deficits in Developing Countries", National Bureau of Economic Research, Vol. 6, pp-23.

[22] Daud Sitinurazra Mohd. (2009), "Issues in International Economics: An Empirical Study on Sustainability, External Debt and Reserve Management", www.eprints.soton.ac.uk

[23] Catherine Pattillo, Poirson and Luca Ricci (2002), "External Debt and Growth", IMF Working Paper, Volume WP/02/69, April, pp-02

[24] Kalonji K, R Nallar, M Mlachila and B Loko (2003), "The Impact of External Indebtedness on Poverty in Low Income Countries", IMF Working Paper No. 03/ 61, www.imf.org/external/ pubs

[25] Arnone M, L Bandiera, and A Presbitero (2005), "External Debt Sustainability: Theory and Empirical Evidence". Econpapers.repec.org/paper, viewed on 5th July 2013.

[26] Imed Drine and Sami Nabi (2005), "Public External Debt, Informality and Production Efficiency in Developing Countries", Research Journal of Economic Theory, June, PP-89-99

economic growth. They analyzed the effect of public external debt on production efficiency for a period 1970-2005 in 27 developing countries using a stochastic frontier technique with unobserved heterogeneity.

Ayadi (2008)[27] investigated the impact of external debt with its servicing requirements on economic growth of Nigerian and South African economies using OLS technique, covering period 1980-2007. The researcher found that South Africa performed better than Nigeria in application of external loans to promote growth during the period of study. In case of Nigeria the external debt contributed positively to economic growth up to a point after which its contribution became negative. Safia (2010)[28]in a research paper "Does External Debt Affect Economic Growth: Evidence from Developing Countries" also made an attempt to examine whether external debt stock and the external debt servicing leads to crowding out. By using OLS technique on dataset of 24 developing countries over the period 1976-2003 he found resultsof the study consistent with both the debt overhang theory and the liquidity constraint hypothesis. The researcher concluded that the external debt stock adversely affects economic growth, and higher level of external debt stock leads to crowding out.

It is fundamentally expected that the marginal product of capital should be higher than the world interest rate for developing countries (Eaton, 1993).[29]Since external debt helps to exploit the potentials of a country, the only guideline is that the rate of return on spending should exceed the marginal cost of borrowings. Taking this as basic assumption Savvides (1992)[30]tried to measure the impact of debt overhang on the country's economic performance. He used a Two Stage Limited Dependent Variable model (2SLDV) on cross section time series data of 43 Less Developing Countries (LDCs) encountering debt problem. The study concluded that debt overhang and decreasing foreign capital flows have significant negative impact on investment rates.

Krugman (1988)[31] examined trade-offs facing creditors of a country whose debt is large enough that the country cannot attract voluntary new lending. The results of empirical models revealed that external debt can influence negatively the investment and consequently the economic growth through Debt Overhang (DO). The researcher concluded that a country has a debt overhang problem when the expected present value of potential future resource transfers is less than its debt. Cohen (1993)[32] estimated an investment

---

[27] Ayadi F (2008), "The impact of External Debt on Economic growth: A comparative study of Nigeria and South Africa", Journal of Sustainable Development in Africa, Volume 10, PP-03.

[28] Shabbir Safia (2010), " Does External Debt Affect Economic Growth: Evidence From Developing Countries",(aysps.gus.edu/sites)econ_ma_shabbir.pdf) viewed on 14/07/2013

[29] Eaton J (1993), "Sovereign Debt: A Primer", World Bank Economic Review, Vol. 7 (3): 137-172, PP - 08

[30] Savvides A (1992), "Investment Slowdown in Developing Countries during the 1980s: Debt Overhang or Foreign Capital Inflows", Kyklos Publications, Vol. 45(3), pp-363-378.

[31] Krugman P, (1988), "Financing Vs. Forgiving: A Debt Overhang", National Bureau of Economic Research, Working Paper No.2486.

[32] Cohen D (1993), "Low Investment and Large LDC Debt in the 1980s", American Economic Review, Vol. 83 (3), PP - 437-449

equation for a sample of 81 developing countries over three sub periods using OLS method. The author concluded that the level of debt does not explain the slowdown of investment in highly rescheduling developing countries.

Warner (1992)[33] made an attempt to measure the effect of debt crisis on investment using Ordinary Least Square estimation for 13 less developed countries covering the period 1982-1989. The results revealed that the reasons behind the decline of investment in many heavily indebted countries are declining export prices, high world interest rates and sluggish growth in developed countries. Fosu (1996)[34] tested the relationship between economic growth and external debt in sub Saharan African countries over a period 1970-1986 using OLS method. The study examined the direct and indirect effect of debt hypothesis. The study revealed that GDP is negatively influenced via a diminishing marginal productivity of capital. The study also revealed that on the average a high indebted country faces about one percent reductions in GDP growth annually.

Schclarek et al. (2005)[35], Karagol (2010)[36], Safdari and Masoud (2011)[37], and Lawrence and Michael (2012)[38], analyzed the inverse effect of external debt on economic growth on various developing countries particularly Nigeria, Iran, Turkey and Latin American countries by applying OLS, and GMM Panel Estimator. Ogunmuyiwa (2010)[39] examined as to whether external debt promotes economic growth in developing countries using Nigeria as a case study. Using various econometric techniques such as ADF, Granger Causality, Johansen Co-integration, and VECM on time series data for a period 1970-2007, the researcher concluded that there is no evidence of causality between external debt and economic growth. The causation between debt and growth was also found to be weak/ insignificant in Nigeria.

Catherine et al. (2002)[40] using large panel data of 93 countries for a period of 1968-1998 analyzed the impact of external debt on economic performance of countries. They observed that large debt service is expected to have negative effects on economic performance of a country because of the uncertainty regarding the portion of the debt that will be serviced with country's own resources. They further mentioned that the misallocation of investment lowers the efficiency of overall capital accumulation. The study finally concluded that high

---

33 Warner AM, (1992), "Did the Debt Crisis Cause the Investment Crisis?", Journal of Applied Sciences, Vol. 107 (4), PP - 1161-1186.

34 Fosu AK (1996), "The Impact of External Debt on Economic Growth in Sub Saharan", African Journal of Economic Development, Vol. 21(1), PP - 93-118.

35 Schclarek Alfredo and Francisco Ramon-Ballster (2005), "External Debt and Economic growth in Latin America" http://www.cbeconomia.com/delta-latin.pdf, Viewed on 19th July 2013.

36 Karagol Erdal (2010), "The Causality Analysis of External Debt Service and GNP: The Case of Turkey" http://www.tcmb.gov.tr/research/cbreview/jan02-3.pdf, viewed on 8/07/2013.

37 Safdari Mehdi and Masoud Abouie Mehrizi (2011), "External Debt and Economic Growth In Iran", Journal of Economics and international Finance, Vol. 3 (5), pp-322

38 Lawrence Ajayi and Bob Michael (2012), "Effect of External Debt on Economic Growth and Development of Nigeria", International Journal of Business and Social Science, Vol. 3, pp-297

39 Ogunmuyiwa MS (2010), "Does External Debt Promote Economic Growth in Nigeria?" Research Journal of Economic Theory, August, PP - 29

40 Catherine Pattillo, Poirson and Luca Ricci (2002), Op.cit., pp-02

levels of debt and associated uncertainty might affect growth also via investment efficiency and productivity.

In nutshell, many studies have investigated the effect of external debt on economic growth. Some end up finding with a negative impact of external debt on economic growth, while others do not find any significant relationship between external debt and economic growth. Most of these studies have used real GDP and GDP growth rate as dependent variables and tried to explore the direct impact of external debt and debt servicing on GDP growth rate. Only a few studies focused on assessing the impact of external debt on per capita GDP, long term consumption pattern, and capital formation. Since the findings of these studies are mixed, it is hard to say whether external debt has positive, negative or any significant impact on economic growth.

SIGNIFICANCE OF STUDY

It is true that the focus of external debt is motivated to enhance the economic development, but it starts affecting economic development adversely when the external debt is not managed efficiently. It is observed by many researchers that the accumulation of external debt particularly in developing countries may ascend a problem of debt overhang and original sin.

The empirical literature available on the problem of external debt show indistinguishable state of affairs related with a variety of issues of external debt in developed and some of the developing countries. But, till now there is no comprehensive study manifesting assorted aspects in reference to developing countries in general and India in particular. Hence, the researcher feels the need to investigate various aspects of external debt (e.g. causes, determinants, and management) in Indian context, and also to examine whether external debt has really ignited India's growth engine or not.

OBJECTIVES

The proposed study will focus on following objectives.

1. To examine growth and sustainability of External Debt in India.
2. To study the Systems, Policies and Strategies formulated by Government of India for External Debt Management.
3. To analyze the impact of identified macro-economic factors on India's External Debt.
4. To analyze the impact of External Debt on India's Macro-economic Performance.
5. To suggest optimal policy options for effective management of External Debt in India.

METHODOLOGY

The specific Research methodology with respect to above objectives will be as follows.

1. For understanding growth composition of external debt in India the researcher would analyze the trends and pattern of external debt with the help of secondary information. The External Debt Sustainability of India will be analyzed using debt performance indicators developed by IMF and World Bank. For this purpose the researcher will use the methods, viz., (i) The Accounting Approach, and (ii) Present Value Borrowing Constraint Approach.

2. The systems, polices and strategies formulated by government of India for external debt management will be analyzed by using secondary information available in the publications of government of India and other regulatory authorities.
3. The determinants of external debt will be identified by reviewing available literature on the topic, and also by consulting researchers, academicians, and the executives of Regulatory Authorities.
4. The impact of selected factors on India's External Debt will be analyzed using Unit Root (ADF/ PP) Test, OLS, Johansen Co-integration/ Granger Causality.
5. The Impact of External Debt on India's macroeconomic performance will be traced by using Unit Root (ADF/ PP) Test, OLS, Johansen Co-integration/ Granger Causality.

SAMPLE, DATA SERIES AND SOURCES

- **DATA SERIES**: Annual data spanning from 1991 to 2013
- **DATA SOURCES**: The researcher will collect secondary information from Books, Journals, Reports, Working papers, Newspapers and Statistical data base of IMF, IBRD, BIS and UNCTAD, The information will also be collected from official websites of India.

  For primary information, the researcher will prepare Structured Questionnaire. This will be executed on (i) researchers and academicians, and (ii) the executives of Regulatory Authorities. The proposed sample size is 50 equally distributed among various categories of respondents.

TOOLS TO BE USED

The researcher plans to use following statistical/ econometrics tools.

1. Basic Descriptive: Mean Standard Deviation, and Correlation.
2. Debt Indicator Ratios
3. Factor Analysis
4. OLS and Multiple Regression
5. Unit Root (ADF/ PP) Test
6. Johansen Co-integration/ Granger Causality

PROPOSED CHAPTER PLAN

Chapter 1: Introduction
Chapter 2: Review of Literature
Chapter 3: India's External Debt: Growth and Sustainability
Chapter 4: Determinants of India's External Debt
Chapter 5: Impact of External Debt on India's Macroeconomic performance
Chapter 6: Conclusion and Suggestions

BIBLIOGRAPHY

BOOKS AND REPORTS

- Acharya Shankar (2012), India: After the Global Crisis, Orient Black Swan Private Limited, Hyderabad.
- Agarwal AN and Kundan Lal (1994), "Economics of Development and Planning", 2nd edition, Vikas Publications
- Asteriou Dimitorios (2006), Applied Econometrics: A Modern Approach Using E-Views and Microfit, Palgrave Macmillan Limited, Hampshire.
- Daniel S Shaffer (2010), Profiting in Economic Storms, John Wiley and Sons, New Jersey.
- Dutt Ruddar and KPM Sundharam (2010), Indian Economy, S Chand and Company Ltd, New Delhi.
- Economic Survey (2012), Ministry of Finance, Government of India, New Delhi.
- Fontanills George A and Tom Gentile (2002), The Volatility Course, Wiley Trading, Hoboken, US
- Global Development Finance (2012), External Debt of Developing Countries, Grey Book.
- Gujarathi Damodar N (2009), Basic Econometrics, Fifth Edition, McGraw-Hill Higher Education, New York
- Gujarathi Damodar N (2011), Econometrics by Example, Palgrave Macmillan Limited, Hampshire
- IMF External Debt Statistics (2003), Guide for Compilers and Users. IMF Publication
- Jain Gopal Lal (1999), "Economic Growth and Development in India and other Developing Countries", Mangal Deep Publication
- Jalan Bimal (2001), Banking and Finance in India: Managing New Challenges, in R Kapila and U Kapila (Ed.), India's Economy in the 21st Century, Academic Foundation, New Delhi.
- Joshi Vijay and IMD Little (1996), "India's Economic Reforms 1991-2001", Oxford Clarendon Press
- Maddala GS (2001), Introduction to Econometrics, Third Edition, John Wiley and Sons, Singapore.
- Mills Terence C and Raphael N Markellos (2010), Econometric Modelling of Financial Time Series, Third Edition Cambridge University Press, UK
- Panneerelvam R (2011), Research Methodology, PHI Learning Private Limited, New Delhi
- Patterson Kerry (2002), An Introduction to Applied Econometrics: A Time Series Approach, Palgrave Macmillan Limited, Hampshire
- Report on External Debt Status (2011), Ministry of Finance, Govt. of India
- Thirlwall AP (2006), "Growth and Development with Special Reference to Developing Economies", 8th edition, Palgrave Mc Milan

RESEARCH PAPERS IN JOURNALS

- Anklesaria Aiyar Swaminathan, (2004), "How Original Sin Affects India", The Economic Times, April 28, Can be viewed from http://articles.economictimes. indiatimes.com/ 20040428/news/27371974_1_currencies-exchange-rate-original-sin
- Arnone M, L Bandiera, and A Presbitero (2005), "External Debt Sustainability: Theory and Empirical Evidence", http://128.118.178.162\eps\if\papers\0512\512007.pdf, Viewed on 18th July, 2013
- Ayadi F (2008), "The impact of External Debt on Economic growth: A comparative study of Nigeria and South Africa", Journal of Sustainable Development in Africa, Volume 10, PP-03.
- Barkley J Rosser Jr. and Marina Rosser (2005), "Comparative Economics in a Transforming World Economy", Prentice Hall of India, New Delhi, 2nd Ed.
- Catherine Pattillo, Poirson and Luca Ricci (2002), "External Debt and Growth", IMF Working Paper, Volume WP/02/69, April
- Catherine Pattillo, Poirson and Luca Ricci (2002), "External Debt and Growth", Finance and Development: A Quarterly Magazine from IMF, June 2002, Volume 39, No. 2

- Cohen D (1993), "Low Investment and Large LDC Debt in the 1980s", American Economic Review, Vol. 83 (3)
- Cuddington John T (1996), "Analyzing the Sustainability of Fiscal Deficits in Developing Countries", National Bureau of Economic Research, Vol. 6,pp-23-24, (Can be viewed on SSRN-id597231.pdf)
- Daud Sitinurazra Mohd. (2009), "Issues in International Economics: An Empirical Study on Sustainability, External Debt and Reserve Management", http//eprints.soton.ac.uk
- Eaton J (1993), "Sovereign Debt: A Primer", World Bank Economic Review, Vol. 7 (3): 137-172
- Eaton J and M Gersowitz (1981), "Debt with Potential Repudiation: Theoretical and Empirical Analysis", Review of Economic Studies, 48 (2)
- Eichengreen Barry, Ricardo Hausmann, Ugo Panizza (2003), "Currency Mismatches, Debt Intolerance and Original Sin", NBER working paper/ w10036
- Eichengreen, B Joseph and Portes, Rene (1986), "Debt and default in the 1930s: Causes and Consequences", European Economic Review, 30 (3)
- Fosu AK (1996), "The Impact of External Debt on Economic Growth in Sub Saharan", African Journal of Economic Development, Vol. 21(1)
- Hajivassiliou VA (1987), "The External Debt Repayments Problem of LDC's: An Econometric Model Based on Panel Data", Journal of Econometrics, Number 36 (1-2)
- Imed Drine and Sami Nabi (2008), "Public External Debt, Informality and Production Efficiency in Developing Countries", Research Journal of Economic Theory, June
- Kalonji K, R Nallar, M Mlachila and B Loko (2003), "The Impact of External Indebtedness on Poverty in Low Income Countries", IMF Working Paper No. 03/ 61, www.imf.org/ external/ pubs
- Krugman P, (1988), "Financing Vs. Forgiving: A Debt Overhang", National Bureau of Economic Research, Working Paper No.2486.
- Menbere Workie Tiruneh (2004), "An Empirical Investigation into the Determinants of External Indebtedness" Prague economic papers
- Muwanga ESK Zake and Stephen N (1996), "The HIPC Debt Relief Initiative: Uganda's Experience", UNCTAD Discussion Paper No. 2001/ 94
- Ogunmuyiwa MS (2010), "Does External Debt Promote Economic Growth in Nigeria?" Research Journal of Economic Theory, August
- Report of World Bank and IMF (2001), "The Challenge of Maintaining Long Term External Debt Sustainability", Volume 1
- Ricardo Hausmann, and Ugo Panizza (2003), "The Mystery of Original Sin", Kennedy School of Government, Harvard University, and Research Department Inter-American Development Bank
- Savvides A (1992), "Investment Slowdown in Developing Countries during the 1980s: Debt Overhang or Foreign Capital Inflows", Kyklos Publications, Vol. 45(3)
- Warner AM, (1992), "Did the Debt Crisis Cause the Investment Crisis?", Journal of Applied Sciences, Vol. 107 (4)

Ishan Shanker
Research scholar

Dr. Swami Prasad Saxena
Supervisor

Head
Dept. of Applied Business Economics

Dean
Faculty of Commerce